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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,282	02/19/2004	Armand Bettinelli	PF030040	4246
24498	7590	12/02/2005	EXAMINER	
THOMSON LICENSING INC. PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			MACCHIAROLO, PETER J	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/782,282	BETTINELLI ET AL.	
	Examiner	Art Unit	
	Peter J. Macchiarolo	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The reply filed on 09/23/2005 consists of remarks related to the prior rejection of claims in the Previous Office Action. The above have been entered and considered. However, pending claims 1-6 are not allowable as explained below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(a) as being clearly anticipated by Kimura et al (JP 2003-157773: “Kimura”).

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Regarding claim 1, Kimura discloses in figures 1, 2, 4, a plasma panel comprising two plates (11, 21) leaving a sealed space between them, which space is filled with discharge gas and is divided into discharge cells that are bounded between these plates by barrier ribs (24a) forming an array, the said cells being distributed in rows and columns, characterized in that the barrier rib portion (24b) that separates any two adjacent cells of the same column includes a

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cavity that is made in the thickness of the said rib and emerges at the top of the said rib, and also includes a notch that brings the two said cells into communication with each other through the said cavity.

Claims 1-3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kunii et al (US PG PUB 20020047519: "Kunii").

Regarding claim 1, Kunii shows in figures 1, 3, and 4 a plasma panel comprising two plates (11, 21) leaving a sealed space between them, which space is filled with discharge gas and is divided into discharge cells (R, G, B) that are bounded between these plates by barrier ribs (291) forming an array, the said cells being distributed in rows and columns, characterized in that the barrier rib portion (292) that separates any two adjacent cells of the same column includes a cavity (33) that is made in the thickness of the said rib and emerges at the top of the said rib, and also includes a notch (difference in height from H1 and H2) that brings the two said cells into communication with each other through the said cavity.

Regarding claim 2, Kunii discloses in figure 4, [0031], and [0041], the depth of the said cavities is greater than or equal to one third of the height of the said barrier ribs.

Regarding claim 3, Kunii discloses in figure 4 and [0043], the maximum width of the cavities, measured in the direction of the said rows, is greater than 50 μm .

Regarding claim 6, Kunii discloses in figure 4 and [0038], the height of the barrier ribs is greater than 120 μm .

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kao et al (US PG PUB 20030214236: "Kao").

Regarding claim 1, Kao discloses in figures 8 and 9b a plasma panel comprising two plates (31, 32) leaving a sealed space between them, which space is filled with discharge gas and is divided into discharge cells (41) that are bounded between these plates by barrier ribs (40) forming an array, the said cells being distributed in rows and columns, characterized in that the barrier rib portion that separates any two adjacent cells of the same column includes a cavity (42) that is made in the thickness of the said rib and emerges at the top of the said rib, and also includes a notch (52) that brings the two said cells into communication with each other through the said cavity.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao.

Regarding claim 4, Kao shows in figure 8 the maximum width of the cavities measured in the direction of the said rows, is equal to the width of the discharge cells minus the width of the

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wide portions 50a, but is silent to the maximum width of the cavities being greater than or equal to twice the width of the notches.

However, Kao does teach in column 7 lines 29-42 that optimization of the size of the wide portions 50a is required to decrease contact stress after the front and back plates are adhered to each other to avoid damaging the barrier ribs. One of ordinary skill in the art will arrive at the maximum width of the cavities being greater than or equal to twice the width of the notches to prevent damaging the ribs while still allowing for the advantages as taught by Kao.

Furthermore, since this exact width is not shown to solve any problems or yield any unexpected results that are not within the scope of Kao's PDP, this is considered to be an obvious matter of design choice. As discussed above, Kao teaches optimization of the notch's width is required.

Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the proper size of a component involves only routine skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct Kao's maximum width of the cavities being greater than or equal to twice the width of the notches.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao in view of previously cited Bettinelli et al (WO 02/052602; "Bettinelli").

Regarding claim 5, Kao is silent to the barrier ribs having a specific porosity and that the width of the notches is less than 60 um.

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However, as discussed above, Kao infers that the one skilled in the art can discover the appropriate dimensions for the notches and cavities.

Furthermore, as Applicant states on page 9, ll. 18-24, Bettinelli teaches that having a rib porosity of greater than 25% allows for an optimum outgassing procedure.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Kao with the width of the notches is less than 60 um, and porosity of the ribs being greater than 25%.

Response to Arguments

Applicant's arguments filed 09/23/2005 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Examiner has attached hereto a machine translation of Kimura for Applicant's convenience.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pjm


JOSEPH WILLIAMS
PRIMARY EXAMINER